

**APPENDIX 1 TO SCHEDULE 3.3
TO THE
COMPREHENSIVE INFRASTRUCTURE AGREEMENT
CROSS FUNCTIONAL SERVICES SOW
DETAILED PACKAGE DRAFT**

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This is Appendix 1 (Cross Functional Services SOW) to Schedule 3.3 (Statements of Work) to the Comprehensive Infrastructure Agreement between the Commonwealth and Vendor (the "Agreement"). Unless otherwise expressly defined herein, the capitalized terms used herein shall have the meaning assigned to them in Appendix 10 (SOW Definitions) to Schedule 3.3 or in the Agreement.

1.0 Cross Functional Services Overview and Objectives

1.1 Services Overview

This Appendix 1 (Cross Functional Services SOW) is the Statement of Work (or "SOW") that sets forth the roles and responsibilities of the Parties for the set of common services that apply generally to the provision, delivery, and management of all Services ("Cross Functional Services") in support of the Commonwealth IT infrastructure. Vendor will provide Cross Functional Services across all Towers. As depicted in Figure 1 below, services, activities and roles and responsibilities described in this SOW are within the scope of each SOW for the Towers (Appendices 2 through 9 of Schedule 3.3) and shall be included within the Fees for each Tower specified in Schedule 10.1 (Fees) to the Agreement. Figure 1 depicts the relationship between the Cross Functional Services SOW, and all SOWs within the scope of the Agreement.

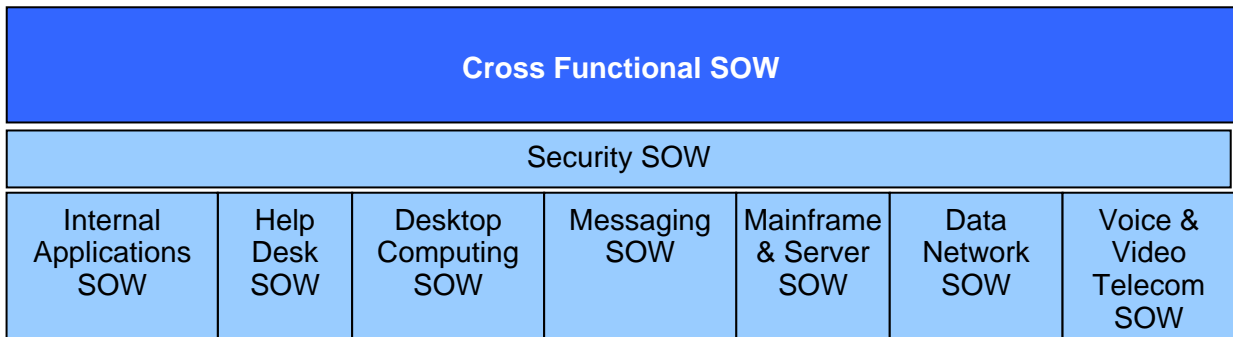


Figure 1: SOW Towers with Cross Functional View

1.2 Service Objectives

The following are the key high-level Service objectives Vendor shall ensure the Commonwealth achieves through the Cross Functional Services:

- Critical IT and service management functions are integrated into and made a part of the Services provided as part of each Tower.
- Commonwealth receives Services with an end-to-end enterprise view across all Towers.

2.0 Service Environment

2.1 Scope of the Infrastructure to be Supported

The Service Environment section in the SOW applicable to each Tower describes the computing environment to be supported and/or with which Vendor shall comply. The service environment includes environment components such as hardware and software, facilities and locations, personnel, policies and procedures, licenses and agreements, work-in-progress and future initiatives. As such, this SOW shall apply to the service environments as specified in the SOW applicable to each Tower. The service environments for each Tower will be documented in the applicable SOW Addenda and are to be maintained by Vendor, reviewed with VITA, updated by Vendor and made available to VITA on a quarterly basis.

3.0 Cross Functional Services Requirements

Vendor shall provide all Cross Functional Services defined in this SOW for each of the Towers, as well as coordination of the delivery of all Services across and among the Towers, which are further described in the following Appendices to Schedule 3.3 – (Statements of Work) to the Agreement:

- Schedule 3.3 – Appendix 2 – Internal Applications Services
- Schedule 3.3 – Appendix 3 – Security Services
- Schedule 3.3 – Appendix 4 – Help Desk Services
- Schedule 3.3 – Appendix 5 – Desktop Computing Services
- Schedule 3.3 – Appendix 6 – Messaging Services
- Schedule 3.3 – Appendix 7 – Mainframe & Server Services
- Schedule 3.3 – Appendix 8 – Data Network Services
- Schedule 3.3 – Appendix 9 – Voice & Video Telecom Services
- Schedule 3.3 – Appendix 10 – SOW Definitions

3.1 Service Descriptions and Roles & Responsibilities

Cross Functional Services include the following Services, activities and roles and responsibilities.

3.1.1 General Responsibilities

The following table identifies General roles and responsibilities associated with this SOW. An “X” is placed in the column under the Party that will be responsible for performing the task. Vendor responsibilities are indicated in the column labeled “Vendor”.

Table 1. General Roles and Responsibilities

General Roles and Responsibilities	Vendor	VITA
1. Identify Commonwealth business requirements		X

General Roles and Responsibilities	Vendor	VITA
2. Provide Services that support Commonwealth business needs, technical requirements and End-User requirements	X	
3. Comply with Commonwealth policies, standards and regulations applicable to the Services	X	
4. Develop and maintain a comprehensive Procedures Manual that contains the actual operational and procedural standards that will be used in the delivery of the Services	X	
5. Conform to changes in laws, regulations and policies. Major changes shall be proposed on a project-by-project effort basis to alter the environment to conform to the new requirements.	X	
6. Report performance against the Service Levels	X	
7. Monitor and audit performance		X
8. Coordinate all changes to the IT infrastructure that may affect the Service Levels of any other Service area.	X	
9. Provide timely creation, updating, maintenance and provision of all appropriate project plans, project time and cost estimates, technical specifications, management documentation and management reporting in a form/format that is acceptable to VITA for all Tower projects and major Service activities	X	
10. Coordinate Service delivery with Help Desks, as well as other support groups within each of the other Towers in coordination with Eligible Customers, VITA, and all appropriate third-parties, as necessary	X	
11. Provide VIP Support Services as necessary	X	

3.1.2 IT Processes and Activities

3.1.2.1 Planning & Analysis

Planning and Analysis Services include the development of business and technology strategies, technology architecture to support the strategies, and conducting the research of new technical trends, products and services, such as hardware components, System Software, and Networks that offer opportunities to improve the efficiency and effectiveness of the Services. Planning and Analysis Services also help support competitive business advantage and mitigate risks by reducing defects and improving the quality of the Services.

The following table identifies the Planning and Analysis roles and responsibilities that Vendor and VITA will perform.

Table 2. Planning and Analysis Roles and Responsibilities

Planning and Analysis Roles and Responsibilities	Vendor	VITA
1. Define Services, standards, timeframes and reporting requirements for planning, project management, and analysis activities		X

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Planning and Analysis Roles and Responsibilities	Vendor	VITA
2. Participate in defining Services, standards, timeframes and reporting requirements for Planning and Analysis activities	X	
3. Review and approve Services, standards and project management practices for Planning and Analysis activities		X
4. Define the Commonwealth's requirements at the enterprise level for all Towers (e.g., business and technology strategy, technology architecture, functional, availability, capacity, performance, backup and IT Service Continuity)		X
5. Perform infrastructure, configuration, technical and service planning and analysis based on the Commonwealth's requirements (e.g., availability, capacity, performance, backup, IT Service Continuity, DR)	X	
6. Provide infrastructure installation and upgrade recommendations	X	
7. Approve infrastructure planning, analysis and recommendations for new applications, infrastructure and Services		X
8. Provide management reports required for Planning and Analysis activities (e.g., utilization and capacity trend reports)	X	
9. Define the Commonwealth's data backup and retention policies and requirements for all Towers		X
10. Recommend data backup and retention procedures for all Towers that meet the VITA-specified Commonwealth requirements	X	
11. Approve recommended data backup and retention procedures for all Towers		X
12. Continuously monitor technical trends through independent research; document and report on products and services with potential use for the Commonwealth as they align with the Commonwealth's business and technology strategy; and otherwise comply with Section 3.5 of the Agreement	X	
13. Perform feasibility studies for the implementation of new and existing technologies that best meet Commonwealth business needs and meet cost, performance and quality objectives	X	
14. Perform project management function	X	
15. Perform project management review and oversight, and provide liaison function to the Commonwealth and End-Users		X
16. Conduct technical and business planning sessions to establish standards, architecture and project initiatives		X
17. Participate in technical and business planning sessions to establish standards, architecture and project initiatives	X	
18. Conduct ongoing, regular planning and recommendations for technology refresh and upgrades	X	
19. Participate in regular planning for technology refresh and upgrades		X
20. Approve plans for technology refresh and upgrades		X

Planning and Analysis Roles and Responsibilities	Vendor	VITA
21. Conduct technical reviews and provide documented recommendations for improvements to the infrastructure that increase efficiency and effectiveness and reduce costs to the Commonwealth	X	

3.1.2.2 Requirements Definition

Requirements Definition Services are the activities associated with the assessment and definition of architectural, functional, performance, IT Service Continuity, and security requirements that also comply with regulatory and Commonwealth policies. These requirements drive the technical design for the environment. The following table identifies Requirements Definition roles and responsibilities that Vendor and VITA will perform.

Table 3. Requirements Definition Roles and Responsibilities

Requirements Definition Roles and Responsibilities	Vendor	VITA
1. Develop Vendor data collection and documentation requirements and definition standards	X	
2. Participate in developing and approve data collection and documentation requirements and definition standards		X
3. Ensure requirements meet security and IT architecture policies and standards of the Commonwealth	X	
4. Conduct interviews, group workshops, and surveys to determine End-User functional, performance, availability, maintainability and IT Service Continuity requirements	X	
5. Participate in appropriate requirements gathering activities (e.g., focus groups, interviews)		X
6. Provide written information in sufficient detail pertaining to the Requirements Definition		X
7. Document all requirements in agreed to formats (e.g., System specifications, data models, Network design schematics)	X	
8. Approve all requirements documents		X
9. Define Acceptance Test Procedures	X	
10. Participate in defining Tower component Acceptance Test Procedures		X
11. Review and approve all Tower component Acceptance Test Procedures		X

3.1.2.3 Design Specifications

Design Specification Services are the activities and deliverables that translate the End-User and respective Eligible Customer information system requirements into detailed technical specifications. The following table identifies Design Specifications roles and responsibilities that Vendor and VITA will perform.

Table 4. Design Specifications Roles and Responsibilities

Design Specifications Roles and Responsibilities	Vendor	VITA
1. Develop and document technical design plans and environment configuration based on Commonwealth standards, architecture, functional, performance, availability, maintainability, security and IT Service Continuity requirements	X	
2. Conduct site surveys for design efforts as required	X	
3. Determine required Tower component upgrade, replacement and/or conversion requirements (e.g., hardware, Software, Networks)	X	
4. Review and approve design plans through coordination with the appropriate Commonwealth technology standards group and design architects		X
5. Provide Vendor written information in sufficient detail pertaining to the design specifications to enable creation of the appropriate design documents		X
6. Document and deliver design specifications	X	
7. Review and approve design specifications		X

3.1.2.4 Acquisition and Management

Acquisition and Management Services are the activities associated with the pricing, evaluation (technical and costing), selection, acquisition, and ongoing management and disposition of new and upgraded Tower components (e.g., hardware, Software, circuits) for Eligible Customers, including compliance with all Commonwealth and Federal Acquisition and Management requirements (e.g., eVA). The following table identifies Acquisition and Management roles and responsibilities that Vendor and VITA will perform.

Table 5. Acquisition and Management Roles and Responsibilities

Acquisition and Management Roles and Responsibilities	Vendor	VITA
1. Establish Acquisition and Asset Management policies and standards		X
2. Develop Acquisition and Asset Management procedures that conform to VITA-established requirements	X	
3. Review and approve Acquisition and Asset Management procedures		X
4. Develop and maintain list of preferred suppliers/vendors	X	
5. Approve list of preferred suppliers/vendors		X
6. Develop and issue acquisition bid requests as required and approved by VITA	X	
7. Establish audit procedures to verify compliance with best practices and best pricing		X
8. Assist in periodic audits of procurement procedures	X	
9. Evaluate proposals against clearly defined objective criteria	X	
10. Negotiate contracts for Vendor purchased/leased Tower related components	X	
11. Negotiate contracts for Commonwealth purchased/leased Tower related components		X

Acquisition and Management Roles and Responsibilities	Vendor	VITA
12. Manage the ordering, procurement, contract management, and delivery processes in compliance with Commonwealth procurement and acceptance processes	X	
13. Manage and track Vendor purchase orders and service orders	X	
14. Co-ordinate delivery and installation of new products and Services, as required	X	
15. Ensure that new equipment/hardware complies with established Commonwealth IT standards and architectures	X	
16. Review and approve selection of hardware platform types to be installed in Commonwealth facilities and Software to be installed on Commonwealth hardware		X
17. Review and approve acquisition acceptance process		X
18. Adhere to Commonwealth acquisition acceptance process	X	
19. Install and configure assets	X	
20. Establish, update, and maintain an asset inventory database and Tower component configuration charts to include VITA-established tracking criteria and asset register data (e.g., manufacturer, model, serial number)	X	
21. Provide tracking data on Commonwealth owned equipment/hardware and Software licenses installed in the Commonwealth environment		X
22. Track Vendor and Commonwealth owned equipment/hardware, circuits and Software licenses installed in the Commonwealth environment	X	
23. Review and approve tracking methodology		X
24. Track and advise VITA in a timely manner of expiration and renewal requirements of device/Software licenses	X	
25. Provide asset inventory and Services reports as requested	X	
26. Provide ability for VITA to inquire into the asset database	X	
27. Periodically review/audit asset inventory management procedures		X
28. De-install hardware and terminate licenses, cleanse storage media, and dispose of, and/or relocate assets as needed/specified and provide disposition reports as needed	X	

3.1.2.5 Engineering/Development

Engineering/Development Services are the activities associated with the engineering and development of the technical infrastructure, tools and utilities that enhance the Services. The following table identifies Engineering/Development roles and responsibilities that Vendor and VITA will perform.

Table 6. Engineering/Development Roles and Responsibilities

Engineering/Development Roles and Responsibilities	Vendor	VITA
1. Create Engineering/Development policies and procedures	X	
2. Participate and review Engineering/Development policies and procedures, as appropriate		X

3. Develop Engineering/Development plans where there is an impact on Commonwealth entities/facilities and/or other third-party agreements.	X	
4. Perform Engineering functions required to implement design plans for additional or new products and Services	X	
5. Perform Engineering functions required to implement and manage Tower Services on Commonwealth owned/leased facilities	X	
6. Manage Engineering/Development efforts using formal project management tools and methodologies	X	
7. Review and approve Engineering/Development plans		X
8. Implement approved Engineering/Development plans	X	

3.1.2.6 Integration and Testing

Integration and Testing Services are the activities that ensure that all individual Commonwealth infrastructure components configured with or added to the infrastructure work together cohesively to achieve the intended results. The following table identifies Integration and Testing roles and responsibilities that Vendor and VITA will perform.

Table 7. Integration and Testing Roles and Responsibilities

Integration and Testing Roles and Responsibilities	Vendor	VITA
1. Develop Integration and Testing policies and procedures	X	
2. Review and approve Integration and Testing policies and procedures and deliverables		X
3. Manage Integration and Testing environment(s)	X	
4. Maintain software release matrices across development, QA, and production environments and Networks	X	
5. Review and approve the software release matrix		X
6. Conduct integration and security testing for all new and upgraded equipment, Networks, Software or Services to include unit, Systems, integration and regression testing	X	
7. Evaluate all new and upgraded Tower components or Services for compliance with the Commonwealth's security and IT architecture policies, regulations and procedures	X	
8. Assess and communicate the overall impact and potential risk to Tower components prior to implementing changes	X	
9. Review and approve assessment results prior to migration into production		X
10. Define End-User Acceptance Criteria		X
11. Stage new and upgraded equipment, Software or Services to smoothly transition into existing environment	X	
12. Perform modifications and performance-enhancement adjustments to System Software and utilities as needed	X	

Integration and Testing Roles and Responsibilities	Vendor	VITA
13. Test new releases of supported hardware and Software to ensure conformance with the Service Levels	X	
14. Provide and support Middleware required to integrate Software and hardware	X	
15. Provide integration of Application Software		X
16. Perform Configuration Management and Change Management activities related to Integration and Testing	X	

3.1.2.7 Implementation and Migration

Implementation and Migration Services are the activities associated with the installation of new and upgraded hardware, Software and Network components. The following table identifies Implementation and Migration roles and responsibilities that Vendor and VITA will perform.

Table 8. Implementation and Migration Roles and Responsibilities

Implementation and Migration Roles and Responsibilities	Vendor	VITA
1. Define Tower component Implementation and Migration policies and procedures	X	
2. Review and approve Tower component Implementation and Migration policies and procedures		X
3. Coordinate and review all Implementation and Migration plans and schedules with VITA in advance in accordance with change management policies in the Procedures Manual	X	
4. Approve Implementation and Migration plans and schedules		X
5. Conduct pre-installation site surveys, as required	X	
6. Install enhancements to technical architecture or Services provided	X	
7. Install new or enhanced Tower components (e.g., hardware, Software, Middleware, utilities, Networks, peripherals, configurations)	X	
8. Perform Tower component upgrades as a result of new and enhanced applications and/or architectures (e.g., hardware, Software, Middleware, utilities, Networks, peripherals, configurations)	X	
9. Install physical infrastructure as required (e.g., wiring, cable plant, cooling) in (i) Vendor's facilities and (ii) the Commonwealth's facilities as required by VITA	X	
10. Coordinate Implementation and Migration support activities with VITA and all appropriate Help Desks	X	
11. Perform data migration, including data conversion for in-scope applications, by electronic or manual methods as a result of implementation or migration (e.g., databases, Network system management repositories, address tables, Management Information Bases (MIBs))	X	
12. Perform appropriate tests on all IMACs	X	
13. Conduct and document End-User acceptance tests (UAT) plans and results	X	
14. Approve UAT plans and results		X

Implementation and Migration Roles and Responsibilities	Vendor	VITA
15. Provide Commonwealth IT technical staff and End-Users with training related to the implementation of new products and Services on request	X	

3.1.2.8 Environment and Facilities Support

Environment and Facilities Support Services are activities associated with maintaining environmental and facilities requirements at designated Commonwealth facilities (e.g., HVAC, power, cabling, fire suppression, physical security). The following table identifies Environment and Facilities Support roles and responsibilities that Vendor and VITA will perform.

Table 9. Environmental and Facilities Support Roles and Responsibilities

Environmental and Facilities Support Roles and Responsibilities	Vendor	VITA
1. Designate Commonwealth facilities at which Vendor shall perform Services and activities associated with maintaining Environment and Facilities Support requirements		X
2. Identify requirements for Commonwealth Environment and Facilities Support		X
3. Identify requirements for the Commonwealth environment for Vendor-supported components	X	
4. Develop and document procedures for Environment and Facilities Support	X	
5. Approve Environment and Facilities Support procedures		X
6. Monitor environmental systems (e.g., UPS) required to support Tower components as required (e.g., computer rooms)	X	
7. Develop and recommend improvement plans for Commonwealth-monitored facilities as needed to maintain an effective and secure computing environment	X	
8. Implement or coordinate the implementation of all approved upgrades and installations for Environment and Facilities with appropriate Eligible Customer personnel and third parties	X	
9. Coordinate Eligible Customer site activities of all personnel (i.e., Vendor employees and others) working in equipment locations (e.g., equipment rooms, Network equipment closets)	X	
10. Ensure that Facilities Support activities conform to the requirements of the defined Change Management processes set forth in the Procedures Manual	X	

3.1.2.9 Training and Knowledge Transfer

Training and Knowledge Transfer Services consist of the following:

- a. Provision of training for the improvement of skills through education and instruction for Vendor Personnel and Managed Employees. Vendor will participate in any initial and on-going training delivered by the Commonwealth, as required by the Commonwealth, that would provide a learning opportunity about the Commonwealth's business and technical environment.

- b. Provision of training for the Commonwealth's retained technical staff (including the Retained Personnel) for the express purpose of exploitation of the functions and features of Commonwealth computing environment. Delivery methods may include classroom style, computer-based, individual, or other appropriate means of instruction.
- c. Provision of VITA-selected classroom-style and computer-based training (case-by-cases basis) for standard Commercial-off-the-Shelf (COTS) applications, including new employee training, upgrade classes and specific skills.

The following table identifies Training and Knowledge Transfer roles and responsibilities that Vendor and VITA will perform.

Table 10. Training and Knowledge Transfer Roles and Responsibilities

Training and Knowledge Transfer Roles and Responsibilities		Vendor	VITA
1.	Develop and document training and knowledge database requirements and policies	X	
2.	Participate in development of and review and approve training requirements		X
3.	Develop and document procedures that meet training requirements and adhere to defined policies	X	
4.	Approve training procedures		X
5.	Develop program to instruct Commonwealth personnel on the provision of the Services (e.g., "rules of engagement", requesting Services)	X	
6.	Approve Vendor developed training program		X
7.	Develop, implement and maintain a Commonwealth accessible knowledge database/portal	X	
8.	Develop and implement knowledge transfer procedures to ensure that more than one individual understands key components of the business and technical environment	X	
9.	Participate in Commonwealth delivered instruction on the business and technical environment	X	
10.	Develop and document training requirements that support the ongoing provision of the Services, including refresher courses as needed and instruction on new functionality	X	
11.	Take training classes as needed to remain current with Systems, Software, features and functions for which Vendor Help Desk support is provided in order to improve Service performance (e.g., First Call Resolution)	X	
12.	Remain up to date with current technology trends pertaining to the technology advances relevant to Service areas	X	
13.	Provide training when substantive technological changes as defined by VITA (e.g., new systems or functionality) are introduced into the Commonwealth environment to facilitate full exploitation of all relevant functional features	X	

Training and Knowledge Transfer Roles and Responsibilities	Vendor	VITA
14. Provide training materials for Commonwealth technical staff for Level 1 supported applications	X	
15. Provide ongoing training materials for Help Desk personnel on Commonwealth business and technical environments as defined by VITA		X
16. Provide VITA selected classroom-style and computer-based training (case-by-cases basis) for standard Commercial-off-the-Shelf (COTS) applications		X

3.1.2.10 Documentation

Documentation Services are the activities associated with developing, revising, archiving, maintaining, managing, reproducing, and distributing Tower information (e.g., project planning materials, System design specifications, Network diagrams, Procedures Manuals, operations guides) in hard copy and electronic form. The following table identifies Documentation roles and responsibilities that Vendor and VITA will perform.

Table 11. Documentation Roles and Responsibilities

Documentation Roles and Responsibilities	Vendor	VITA
1. Define Documentation requirements and formats that are in accordance with mutually agreed-upon Change Management and IT Service Continuity and DR requirements and procedures	X	
2. Participate in defining Documentation requirements and formats as appropriate		X
3. Approve Documentation requirements and formats		X
4. Establish, maintain, secure, backup, and update a Documentation library utilizing storage and access methodologies and technology (e.g., online electronic storage, hard copy) appropriate for the document types being stored which supports the agreed upon requirements and formats	X	
5. Provide output in agreed format for support of Services activities as specified in each Tower throughout the Term	X	
6. Document and update System specifications and configurations (e.g., interconnection topology, configurations, Network diagrams)	X	
7. Provide Commonwealth-specific System operating requirements		X
8. Document standard operating procedures (e.g., boot, failover, spool management, batch processing, backup)	X	
9. Document policies, Procedures Manual, production and maintenance schedules, and job schedules	X	
10. Update all appropriate Documentation as necessary as a result of any Systems or Services changes in accordance with Change Management procedures	X	
11. Provide VITA-designated and authorized personnel access to all Documentation as required by VITA	X	

3.1.2.11 Operations and Administration

Operations and Administration Services are the activities associated with providing a stable IT System infrastructure and to effectively and efficiently perform procedures to ensure the Services meet the Service Level Performance Targets and requirements. The following table identifies Operations and Administration roles and responsibilities that Vendor and VITA will perform.

Table 12. Operations and Administration Roles and Responsibilities

Operations and Administration Roles and Responsibilities	Vendor	VITA
1. Provide operations requirements and policies, including schedules for the operation of Tower components		X
2. Participate in developing operations procedures that meet requirements and adhere to defined policies	X	
3. Define and develop operational documentation requirements (run books, contact lists, operations scripts, etc.)	X	
4. Approve operations policies and procedures, documentation and reporting		X
5. Identify System management tools to monitor the IT Systems infrastructure and Commonwealth Software environment	X	
6. Coordinate with VITA to deploy System management tools to monitor the IT Systems infrastructure and Commonwealth applications	X	
7. Install and configure System management tools in such a fashion that Problems, issues and events are proactively identified, reported and Resolved according to prescribed Service Levels	X	
8. Perform event management monitoring of the Services to detect abnormal conditions or alarms, log abnormal conditions, analyze the condition and take corrective action	X	
9. Manage hardware, Software, peripherals, Services and spare parts to meet the Service Levels, minimize down time and minimize Commonwealth resource requirements	X	
10. Interface with Help Desk(s) and VITA for Incident & Problem Management activities	X	
11. Provide Level 2 and Level 3 support as required	X	
12. Manage and coordinate Subcontractors and third parties in order to meet Service and Service Level requirements	X	
13. Develop and provide operational reports (daily, weekly, monthly) that provide status of operational activities, production issues, and key operational metrics	X	
14. Review and approve operational reports		X
15. Manage backup media inventory (tape, disk, optical and other media type) including the ordering and distribution of media	X	
16. Perform Tower component backups and associated rotation of media	X	
17. Archive data media at a secure offsite location in accordance with the IT Services Continuity and Disaster Recovery Services	X	

Operations and Administration Roles and Responsibilities	Vendor	VITA
18. Ensure ongoing capability to recover archived data from media as specified (backwards compatibility of newer backup equipment)	X	
19. Test backup media to ensure incremental and full recovery of data is possible and ensure Tower component integrity as required or requested by VITA	X	
20. Recover files, file system or other data required from backup media as required or requested by VITA	X	
21. Provide recovery and backup requirements and updates as they change		X
22. Conduct Disaster Recovery testing per policies and procedures	X	
23. Audit operations and administration policies for compliance with Commonwealth policies		X
24. Provide VITA with a copy of or access to any Vendor or third-party vendor-supplied documentation (including updates thereto) upon request	X	

3.1.2.12 Maintenance

Maintenance Services are the activities associated with the maintenance and repair of hardware, Software and Networks to include "break-and-fix" services. Installed platform and product version levels are to be maintained at an N-1 release level, unless coordinated with and approved by VITA. The following table identifies Maintenance roles and responsibilities that Vendor and VITA will perform.

Table 13. Maintenance Roles and Responsibilities

Maintenance Roles and Responsibilities	Vendor	VITA
1. Define Maintenance and repair policies, procedures and schedules	X	
2. Review and approve Maintenance and repair policies and procedures and schedules		X
3. Define dispatch requirements and point-of-service locations that are Eligible Customer locations		X
4. Ensure appropriate Maintenance coverage for all Vendor-managed Tower components	X	
5. Provide Maintenance and Break/Fix support in the Commonwealth locations, including dispatching repair technicians to the point-of-service location if necessary	X	
6. Perform diagnostics and Maintenance on Vendor-managed Tower components including hardware, Software, peripherals, Networks and special purpose devices as appropriate	X	
7. Install manufacturer field change orders, service packs, firmware, and Software maintenance releases, etc.	X	
8. Develop Patch Management process	X	
9. Review and approve Patch Management process		X

Maintenance Roles and Responsibilities	Vendor	VITA
10. Perform product patch, "bug fix," service pack installation or upgrades to the current installed version	X	
11. Perform Software distribution and version control, both electronic and manual	X	
12. Replace defective parts including preventive maintenance, according to the manufacturer's published MTTR rates	X	
13. Conduct Maintenance and parts management and monitoring during warranty and off-warranty periods	X	

3.1.2.13 Technology Refreshment and Replenishment

Technology Refreshment and Replenishment ("TR&R") Services are the activities associated with modernizing the IT infrastructure on a continual basis to ensure that the System components stay current with evolving industry standard technology platforms. The following table identifies Technology Refreshment and Replenishment roles and responsibilities that Vendor and VITA will perform.

Table 14. Technology Refreshment and Replenishment Roles and Responsibilities

TR&R Roles and Responsibilities	Vendor	VITA
1. Recommend and establish TR&R life-cycle management policies, procedures and plans appropriate for support of Commonwealth business requirements and consistent with Section 3.5 and Section 3.11 of the Agreement	X	
2. Approve TR&R policies, procedures and plans in accordance with the Change Management and Release Management processes in Item 3.1.4.4 below		X
3. Manage, maintain, and update as necessary, the approved TR&R policies, procedures, and plans	X	
4. Perform the necessary tasks required to fulfill the TR&R plans	X	
5. Provide management reports on the progress of the TR&R plans	X	
6. Periodically review the approved TR&R implementation plans to ensure they properly support Commonwealth business requirements		X

3.1.3 Service Delivery

3.1.3.1 Capacity Management

Capacity Management Services are activities to ensure that the capacity of the IT infrastructure matches the evolving demands of the Commonwealth in the most cost-effective and timely manner. The process encompasses the following:

- Monitoring performance and throughput of the Services, Systems, and supporting IT components
- Understanding current demands and forecasting for future requirements

- Developing capacity plans which will meet Commonwealth demand and the Service Levels
- Conducting risk assessment of capacity recommendations
- Identifying financial impacts of capacity plans
- Undertaking tuning activities of the Systems and Services

The following table identifies Capacity Management roles and responsibilities that Vendor and VITA will perform.

Table 15. Capacity Management Roles and Responsibilities

Capacity Management Roles and Responsibilities	Vendor	VITA
1. Establish comprehensive Capacity Management planning process	X	
2. Review and approve Capacity Management planning process		X
3. Define, develop and implement tools that allow for the effective Capacity Management monitoring/trending of IT infrastructure, Systems Software and IT components	X	
4. Identify future business requirements that will alter capacity requirements		X
5. Participate in capacity planning activities		X
6. Assess capacity impacts when adding, removing or modifying applications	X	
7. Continually monitor IT resource usage to enable proactive identification of capacity and performance issues	X	
8. Capture trending information and forecast future Commonwealth capacity requirements based on VITA defined thresholds	X	
9. Assess Incidents and Problems related to throughput performance	X	
10. Recommend changes to capacity to improve Service performance	X	
11. Assess impact/risk and any cost of capacity changes	X	
12. Approve capacity-related change recommendations, as appropriate		X
13. Maintain capacity levels to optimize use of existing IT resources and minimize the Commonwealth's costs to receive the Services at agreed to Service Levels	X	
14. Ensure adequate capacity exists within the IT environment to meet Service Level requirements taking into account daily, weekly and seasonal variations in capacity demands	X	
15. Provide utilization and capacity reporting	X	
16. Validate asset utilization & capital efficiency based upon reporting		X

3.1.3.2 Performance Management

Performance Management Services are the activities associated with tuning Tower components for optimal performance. The following table identifies Performance Management roles and responsibilities that Vendor and VITA will perform.

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Table 16. Performance Management Roles and Responsibilities

Performance Management Roles and Responsibilities	Vendor	VITA
1. Develop and document Performance Management requirements for each Tower	X	
2. Review and approve Performance Management requirements		X
3. Develop and document Performance Management procedures that meet requirements and adhere to defined policies as specified in the Procedures Manual	X	
4. Review and approve Performance Management procedures		X
5. Perform Tower component tuning to maintain optimum performance in accordance with Change Management procedures	X	
6. Manage Tower component resources (e.g., devices and traffic) to meet defined availability and performance Service Levels	X	
7. Provide regular monitoring and reporting of Tower component performance, utilization and efficiency	X	
8. Proactively evaluate, identify and recommend configurations or changes to configurations which will enhance performance	X	
9. Develop improvement plans as required to meet the Service Levels	X	
10. Authorize improvement plans		X
11. Implement improvement plans and coordinate with third parties as required	X	
12. Provide technical advice and support to the Eligible Customer Business Software maintenance and development staffs of the as required	X	

3.1.3.3 Service Level Monitoring and Reporting

Service Level Monitoring and Reporting Services are the activities associated with monitoring and reporting of Service delivery with respect to the Service Levels, which shall be performed consistent with this SOW and Section 3.12 of the Agreement. In addition, Vendor shall report Systems management information (e.g., performance metrics, and Systems accounting information) to the designated Commonwealth representatives in a format agreed to by VITA. The following table identifies Service Level Monitoring and Reporting roles and responsibilities that Vendor and VITA will perform.

Table 17. Service Level Monitoring and Reporting Responsibilities

Service Level Monitoring Roles and Responsibilities	Vendor	VITA
1. Approve and document Service Levels and reporting cycles		X
2. Document Service Level requirements and agreements		X
3. Implement appropriate industry-standard tools, processes, and reporting methodologies to monitor and track the Service Levels	X	
4. Report on Service performance improvement results	X	

Service Level Monitoring Roles and Responsibilities	Vendor	VITA
5. Coordinate Service Level monitoring and reporting with designated Commonwealth representative and third-party vendors, as required	X	
6. Measure, analyze, and provide management reports on performance relative to requirements	X	
7. Develop and document Service Level improvement plans where appropriate	X	
8. Review and approve improvement plans		X
9. Implement improvement plans	X	
10. Review and approve Service Level metrics and performance reports		X
11. Provide VITA with online access to performance and SLA reporting and monitoring system	X	

3.1.3.4 IT Service Continuity and Disaster Recovery (DR) Services

IT Service Continuity and Disaster Recovery (DR) Services are the activities required to provide prioritized IT Service Continuity, Disaster Recovery, and Emergency Operations Center management support services for VITA's Critical Infrastructure, including applications, and their associated infrastructure (e.g., CPU, servers, network, data and output devices, End-User Devices) and associated voice and data Networks. VITA applications, associated infrastructure and voice communications services will receive IT Service Continuity and DR Services according to VITA business impact analysis (BIA) documentation. EOC support will be provided in conformance to Commonwealth Emergency Procedures. Vendor must demonstrate that it will consistently meet or exceed VITA IT Service Continuity and DR requirements. The following table identifies IT Service Continuity, DR, and EOC roles and responsibilities that Vendor and VITA will perform.

Table 19. IT Service Continuity and Disaster Recovery Roles and Responsibilities

IT Service Continuity and Disaster Recovery Roles and Responsibilities	Vendor	VITA
1. Define VITA IT Service Continuity and DR strategy, and Commonwealth emergency management requirements and scenarios		X
2. Recommend best practice IT Service Continuity and DR strategies, policies, and procedures	X	
3. Review and approve recommended IT Continuity and DR policies and procedures		X
4. Coordinate with Commonwealth Agency personnel for defining IT Service Continuity, DR, and emergency management requirements and scenarios		X
5. Define the level of participation and involvement required of the Vendor in supporting the Commonwealth's Emergency Operations Center (EOC)		X

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IT Service Continuity and Disaster Recovery Roles and Responsibilities	Vendor	VITA
6. Develop appropriate plans and identify appropriate resources, including an appropriately-qualified Emergency Coordinator, that support the Commonwealth's EOC Emergency Preparedness requirements	X	
7. Assist VITA in IT Service Continuity, DR, and emergency management activities, as requested	X	
8. Develop and maintain a detailed IT Service Continuity and DR plan to achieve VITA IT Services Continuity and DR requirements. This shall include plans for data, back-ups, storage management, and contingency operations that provides for recovering VITA's systems within established recovery requirement timeframes after a disaster affects VITA's use of the Services, as well as plans for recovery of Vendor-owned and provided Systems and services that are critical for supporting Commonwealth business operations	X	
9. Review & Approve IT Service Continuity and DR plans		X
10. Determine and define Commonwealth application criticality, availability, and recovery requirements pertaining to Commonwealth Critical Infrastructure		X
11. Define Commonwealth data (File System, Database, Flat Files, etc.) replication, backup and retention requirements		X
12. Establish processes to ensure IT Service Continuity, DR, and emergency management plans are kept up to date and reflect changes in VITA environment and requirements	X	
13. Review & approve IT Service Continuity and DR procedures		X
14. Establish IT Service Continuity and DR test requirements		X
15. Perform scheduled IT Service Continuity, DR, and emergency management tests per VITA-approved policies and procedures	X	
16. Coordinate involvement of Eligible Customers for IT Services Continuity and DR testing		X
17. Participate in IT Service Continuity and DR tests		X
18. Track and report IT Service Continuity and DR test results to VITA	X	
19. Review & approve IT Service Continuity and DR testing results		X
20. Develop action plan to address any issues arising from IT Service Continuity and DR testing results	X	
21. Review and approve action plan		X
22. Implement approved action plan and provide on going status until completion to VITA's satisfaction	X	
23. Initiate the IT Service Continuity and DR plan in the event of a VITA IT Service Continuity and DR situation and notify Vendor per DR policies and procedures		X
24. Initiate the EOC plan in response to a Commonwealth-declared Emergency		X

IT Service Continuity and Disaster Recovery Roles and Responsibilities	Vendor	VITA
25. Initiate the IT Service Continuity and DR plan in the event of an Vendor DR situation and notify VITA per DR policies and procedures	X	
26. Coordinate with VITA during a VITA-declared IT Service Continuity and DR situation, a Commonwealth-declared Emergency requiring Vendor support of the Commonwealth EOC, as well as any Vendor-declared IT Service Continuity and DR situation per approved policies and procedures	X	

3.1.3.5 Vendor Financial Management and Invoicing

Vendor Financial Management and Invoicing Services are the activities required to provide sufficient detail to support the Commonwealth's and VITA's financial, reporting, and audit requirements, including provision of timely and accurate invoices in sufficient detail. Vendor shall provide detail consistent with the requirements of this SOW and Section 10.3 of the Agreement. The following table identifies Vendor Financial Management and Invoicing roles and responsibilities that Vendor and VITA will perform.

Table 18. Vendor Financial Management and Invoices Roles and Responsibilities

Vendor Financial Management and Invoicing Roles and Responsibilities	Vendor	VITA
1. Identify invoicing, audit and reporting requirements		X
2. Document and maintain the Commonwealth's invoicing, audit and reporting requirements	X	
3. Provide invoice and required supplemental detail reports	X	
4. Approve chargeback reports		X
5. Identify invoicing requirements		X
6. Document and maintain invoicing requirements	X	
7. Provide invoices per VITA's requirements	X	
8. Review and approve invoices		X

3.1.4 Service Support

3.1.4.1 Incident & Problem Management

Incident and Problem Management Services include the activities associated with restoring normal Service operation as quickly as possible and minimize the adverse impact on business operations of the Commonwealth, thus ensuring that the best possible levels of Service quality and availability are maintained.

Problem Management Services also include minimizing the adverse impact of Incidents and related Problems on the business of the Commonwealth that are caused by errors in the IT infrastructure, and to prevent the recurrence of Incidents related to those errors. In order to achieve this goal, Problem Management seeks to get to the root cause of Incidents and then initiate actions to improve or correct the situation.

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The following table identifies Incident and Problem Management roles and responsibilities that Vendor and VITA will perform.

Table 19. Incident and Problem Management

Incident and Problem Management Roles and Responsibilities	Vendor	VITA
1. Define Incident and Problem Management policies and procedures	X	
2. Review and approve Incident and Problem Management policies and procedures		X
3. Establish operations and Service management quality assurance and control programs	X	
4. Approve operations and Service management quality assurance and control programs		X
5. Perform quality assurance and quality control programs	X	
6. Coordinate End-User support activities with the Help Desks	X	
7. Establish Incident and Problem Management classification by priority		X
8. Establish Incident workflow, escalation, communication and reporting processes that help to achieve the Service Level requirements	X	
9. Review and approve Incident classification, prioritization and workflow, communication, escalation and reporting processes		X
10. Provide, configure, and operate Incident and Problem Management system that tracks Incidents across all Towers	X	
11. Provide VITA with access and input capabilities to Incident and Problem Management tracking system to allow for Incident and related Problem monitoring and ad hoc reporting	X	
12. Manage entire Incident and related Problem Management lifecycle process including detection, diagnosis, status reporting to VITA, repair and recovery	X	
13. Ensure Incident Resolution activities conform to defined change control procedures set forth in the Procedures Manual	X	
14. Manage efficient workflow of Incidents including the involvement of third party providers (e.g., vendors, public carriers, ISP)	X	
15. Coordinate and take ownership across all Towers of Incident and Problem Management resolution with VITA and third parties (e.g., public carriers, ISP)	X	
16. Perform Root Cause Analysis of Incidents, document findings, and take corrective actions for the Services. Resolve underlying root cause of the problem and/or substantiate that all reasonable actions have been taken to prevent future reoccurrence	X	
17. Periodically review the state of open Incidents and related Problems and the progress being made in addressing Problems		X
18. Participate in Incident and Problem Management review sessions and provide listing and status of same categorized by Problem impact	X	
19. Authorize close of Incidents as defined in the approved procedures		X

Incident and Problem Management Roles and Responsibilities	Vendor	VITA
20. Identify and recommend possible enhancement opportunities for improved operational performance and potential cost impact	X	
21. Approve projects to implement operational improvements with potential cost impact to VITA		X

3.1.4.2 Root Cause Analysis

Root Cause Analysis Services are the activities required to develop, implement, and maintain a Root Cause Analysis ("RCA") process and perform the activities required to diagnose, analyze, recommend, and take corrective measures to prevent recurring Problems and/or trends. This also includes performing predictive analysis activities, where practical, to identify potential future Problems, develop recommended mitigation plans, and implement approved corrective mitigation actions and processes. Vendor shall provide Root Cause Analysis Services Consistent with the SOW and Section 3.13 of the Agreement. The following table identifies Root Cause Analysis roles and responsibilities that Vendor and VITA will perform.

Table 20. Root Cause Analysis Roles and Responsibilities

Root Cause Analysis Roles and Responsibilities	Vendor	VITA
1. Develop policies and procedures for Root Cause Analysis (e.g., events that trigger an RCA)	X	
2. Approve RCA policies and procedures		X
3. Conduct proactive trend analysis to identify recurring Problems and predict future Problems and points of failure, where practical, from occurring or developing	X	
4. Track and report on recurring Problems and trends or failures and identify associated consequences of Problems	X	
5. Recommend corrective actions or solutions to address recurring Problems or failures	X	
6. Approve corrective actions or solutions to address recurring Problems or failures		X
7. Flag all Incidents that require Root Cause Analysis per the agreed to procedures	X	
8. Identify root cause of Priority 1 and Priority 2 Incidents and recommend appropriate resolution action	X	
9. Approve solutions to address Priority 1 and Priority 2 Incidents		X
10. Provide status report detailing the root cause of and procedure for correcting recurring problems and Priority 1 and Priority 2 Incidents until closure as determined by VITA	X	

3.1.4.3 Configuration Management

Configuration Management Services are activities that provide a logical model of the infrastructure by identifying, controlling, maintaining, and verifying installed hardware, Software and Network versions to account for all IT assets and configurations, provide

accurate information on configurations and provide a sound basis for Incident, Problem, Change Management and Release Management set forth in Item 3.1.4.4 and to verify configuration records against the infrastructure and correct any exceptions. The following table identifies Configuration Management roles and responsibilities that Vendor and VITA will perform.

Table 21. Configuration Management Roles and Responsibilities

Configuration Management Roles and Responsibilities	Vendor	VITA
1. Define Configuration Management policies, and procedures	X	
2. Establish process for tracking configuration changes	X	
3. Approve Configuration Management policies, procedures and processes		X
4. Develop Configuration Management data elements and database structure for supporting Configuration Management	X	
5. Approve Configuration Management data elements and Systems interface/data transfer requirements		X
6. Establish Configuration Management database	X	
7. Select, install and maintain Configuration Management tools	X	
8. Enter/upload configuration data into configuration database	X	
9. Establish process interfaces to Incident and Problem Management, Change Management, technical support, maintenance and asset management processes	X	
10. Establish appropriate authorization controls for modifying configuration items and verify compliance with Software licensing	X	
11. Establish guidelines for physical and logical separation between development, test and production and the process for deploying and back out of configuration items	X	
12. Establish configuration baselines as reference points for rebuilds, and providing ability to revert to stable configuration states	X	
13. Establish process for verifying the accuracy of configuration items, adherence to Configuration Management process, identify process deficiencies and recommend corrective actions	X	
14. Review and approve corrective actions per agreed to process		X
15. Provide VITA Configuration Management reports as required and defined by VITA	X	
16. Audit Configuration Management process for completeness and accuracy of configuration data		X

3.1.4.4 Change Management and Release Management

Change Management and Release Management processes and activities are inter-related and complementary. A high level description of each is provided below.

Change Management Services are activities that are to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes, in

order to minimize the impact of change upon Service quality and consequently to improve the day-to-day operations of the Commonwealth. Change Management covers all aspects of managing the introduction and implementation of all changes affecting all Towers and in any of the management processes, tools, and methodologies designed and utilized to support the Tower components. The Change Management process includes the following process steps:

- Request process
- Recording/Tracking process
- Prioritization process
- Responsibility Assignment process
- Impact/Risk Assessment process
- Review / Approval process
- Implementation process
- Verification (test) process
- Release process
- Closure process

Release Management Services are activities that take a holistic view of a change to a Service to ensure that all aspects of a release, both technical and non-technical are considered together and to plan and oversee the successful rollout of software, hardware and Network; design and implement efficient procedures for distribution and installation of changes. The activities also ensure that only correct, authorized and tested versions are installed and that changes are traceable and secure.

The following table identifies Change Management and Release Management roles and responsibilities that Vendor and VITA will perform.

Table 22. Change Management and Release Management Roles and Responsibilities

Change Management and Release Management Roles and Responsibilities	Vendor	VITA
1. Recommend Change Management and Release Management policies, procedures, processes and training requirements per the Change Management process components outlined above	X	
2. Secure master copies of new versions in a software library and update configuration databases	X	
3. Establish change classifications (impact, priority, risk) and change authorization process		X
4. Participate in the development of the Change Management and Release Management procedures and policies		X
5. Approve Change Management and Release Management procedures and policies		X

Change Management and Release Management Roles and Responsibilities	Vendor	VITA
6. Administer the version control system as it relates to Release Management of Commonwealth custom applications	X	
7. Document and classify proposed changes to the Services, which shall include cost and risk impact and back-out plans of those changes and establish Release Management plans for major changes	X	
8. Provide Change Management and Release Management plan to VITA for review	X	
9. Develop and maintain a schedule of planned changes and provide to VITA for review as required	X	
10. Determine change logistics	X	
11. Schedule and conduct Change Management and Release Management meetings to include review of planned changes and results of changes made	X	
12. Provide change documentation as required	X	
13. Authorize and approve scheduled changes or alter the schedule change requests as defined in the Change Management and Release Management procedures		X
14. Review Release Management details and alter as appropriate to meet the needs of the Commonwealth (e.g., back out plan, go/no go decision)	X	
15. Notify Commonwealth affected clients of change timing and impact	X	
16. Implement change and adhere to detailed release plans	X	
17. Modify configuration database, asset management items, and service catalog (if applicable) to reflect any implemented changes	X	
18. Verify that change met objectives and resolve negative impacts	X	
19. Monitor changes and report results of changes and impacts	X	
20. Conduct UATs as required		X
21. Perform quality control audits and approve change control results		X
22. Maintain master copies of new versions for in-scope Systems in a secured software library and update configuration databases	X	

3.1.4.5 Account Management

Account Management Services are the activities associated with the ongoing management of the Service environment. The following table identifies Account Management roles and responsibilities that Vendor and VITA will perform.

Table 23. Account Management Roles and Responsibilities

Account Management Roles and Responsibilities	Vendor	VITA
1. Develop and document Account Management structure, planning and procedures for ongoing operational management	X	
2. Approve Account Management structure, planning and procedures		X

Account Management Roles and Responsibilities	Vendor	VITA
3. Develop a detailed "IT" service catalog which details Services offered including all service options, pricing, installation timeframes, order process (new, change & remove service) and prerequisites	X	
4. Develop a service ordering process that clearly defines how to order change or delete Services	X	
5. Recommend criteria and formats for administrative, service activity and Service Level reporting	X	
6. Approve criteria and formats for administrative, service activity and Service Level reporting		X
7. Provide Service Level performance criteria for End-User Satisfaction surveys and studies		X
8. Develop and implement End-User Satisfaction program for tracking the quality of Service delivery to End-Users	X	
9. Cooperate and participate in development and participation of End-User Satisfaction program for tracking the quality of service delivery to End-Users		X
10. Implement and conduct the End-User Satisfaction surveys and report results to VITA as per agreed-upon schedules	X	
11. Provide reporting (e.g., statistics, trends, audits)	X	

3.2 Exclusions

The following items are specifically excluded from this SOW:

- a. None

3.3 Service Specific Milestones

Milestones specific to the transition and deployment of Cross Functional Services are listed in the following:

MILESTONE DESCRIPTION	MILESTONE DATE
TBD – Vendor to provide as part of its Transition Plan	

4.0 Service Management

4.1 Objectives

A key objective of the Agreement is to attain Service Levels with Performance Credits where business is impacted through failure to meet significant mission critical Systems or Services, Critical Milestones or objectives, or when Service performance requirements are not met. Service Levels applicable across all Towers are identified in this SOW below. Specific Tower and Cross Functional Service Levels are specified with Performance Credits where business is impacted through failure to meet the applicable Service Levels. Service Levels specific to

Towers are detailed in the Service Level Requirements section of each SOW and those associated with Performance Credits are identified in Schedule 3.12 (Service Level Methodology) of the Agreement.

Vendor shall provide written reports to VITA regarding Vendor's compliance with the Service Levels specified in each SOW.

4.2 Definitions

Appendix 10 (SOW Definitions) to Schedule 3.3 (Statements of Work) of the Agreement provides a list of terms that apply to this SOW and the following Service Levels.

4.3 Service Level Requirements

The following Service Levels represent minimum Service Levels required across all Towers. Vendor must consistently meet or exceed the following Service Levels. The Service Level methodology and the identification of Service Levels associated with Performance Credits are detailed in Schedule 3.12 (Service Level Methodology) of the Agreement.

NOTE: Vendor must provide recommended Minimum Performance % for each Service Level type identified in the Tables below.

Table 24. Incident Resolution SLRs

Definition	<p>Time to resolve Incidents following responses to different Incident priority classifications.</p> <p>The SOW applicable to each Tower categorizes Incidents according to the Incident Resolution Priorities listed below. Tower Incident categorizations are referenced in the Service Management section of the SOW applicable to each Tower.</p>
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Critical Data Center Locations - Incident Resolution Service Level Requirements			
Incident Resolution	Service Measure	Performance Target	Minimum Performance % All SOWs
Priority 1	Time to Resolve	<2 hours	
Priority 2	Time to Resolve	<4 hours	
Priority 3	Time to Resolve	<8 hours	
Priority 4	Time to Resolve	Next Business Day or as prioritized by Vendor	
Root Cause Analysis	Time to Report	Within 24 hours of Incident Resolution	
	Formula	Number of requests completed within Performance Target/Total of all requests occurring during Measurement interval	
	Measurement Interval	Measure Weekly, Report Monthly	
	Measurement Tool	TBD	
Non-Critical & Remote/Distributed Locations - Incident Resolution Service Level Requirements			
Incident Resolution	Service Measure	Performance Target	Minimum Performance % All SOWs
Priority 1	Time to Resolve	<8 hour	
Priority 2	Time to Resolve	<12 hours	
Priority 3	Time to Resolve	<24 hours	
Priority 4	Time to Resolve	Next business day or as prioritized by Vendor	
Root Cause Analysis	Time to Report	Within 24 hours of Incident Resolution	
	Formula	Number of requests completed within Performance Target/Total of all requests occurring during Measurement interval	
	Measurement Interval	Measure Weekly, Report Monthly	
	Measurement Tool	TBD	

Critical Data Center Locations - Incident Resolution Service Level Requirements			
Incident Resolution	Service Measure	Performance Target	Minimum Performance % All SOWs

Table 25. Priority Levels

Priority Level	Description
1 - Emergency/Urgent	<p>The Problem has caused a complete and immediate work stoppage affecting a primary business process or a broad group of users such as an entire agency, department, floor, branch, line of business, or external customer. No Workaround available.</p> <p>Examples:</p> <ul style="list-style-type: none"> Major application Problem (e.g., payroll, call center) Severe Problem during critical periods (e.g., month-end processing) Security Violation (e.g., denial of service, widespread virus) VIP Support
2 - High	<p>A business process is affected in such a way that business functions are severely degraded, multiple End-Users are impacted or a key customer is affected. A Workaround may be available; however the Workaround is not easily sustainable.</p> <p>Examples:</p> <ul style="list-style-type: none"> Major application (e.g., exchange)
3 - Medium	<p>A business process is affected in such a way that certain functions are unavailable to End-Users or a System and/or Service is degraded. A Workaround may be available</p> <p>Examples:</p> <ul style="list-style-type: none"> Telecommunication Problem (e.g., Blackberry, PBX digital/analog card) Workstation Problem (e.g., hardware, software)
4 - Low	<p>An incident that has little impact on normal business processes and can be handled on a scheduled basis. A Workaround is available.</p> <p>Examples:</p> <ul style="list-style-type: none"> End-User requests (e.g., system enhancement) Peripheral Problems (e.g., network printer) Preventative Maintenance

4.3.1 Backup and Restore Requirements

Vendor shall implement and maintain backup and restore capabilities for all Commonwealth Data, System Software, applications and component configurations. Vendor shall perform incremental backups, full backups and full archive backups according to the Backup Schedule presented below. Recovery procedures will be

capable of restoring service delivery for failed Commonwealth Data, applications and component configurations according to the Service Levels listed below. Tower applications requiring scheduled backups are referenced in the Service Environment section of the SOW applicable to each Tower.

Table 26. Backup Schedule

Data Center Computing Services—Backup Schedule and Service Level Requirements						
Type of Backup	Backup Frequency	Storage Site	Retention/Purge Period		Target	Minimum Performance %
			Standard	Regulatory		
Incremental	Daily	Off-site	35 days		Backup Frequency	
Full (Backup)	Weekly	Off-site	5 Weeks		Backup Frequency	
Full (Archive)	Monthly	Off-site	Indefinite		Backup Frequency	
All					Quarterly Test of each type of backup Restore Process	

Table 27. Restore Service Levels

Restore Services Service Level Requirements Table			
Restoration Type	Service Measure	Performance Target	Minimum Performance % All SOWs
Restore Requests for production data	Response Time Data 1 week old or less	Commence restore within 3 hours from VITA request	
Restore Requests for recovery of test data or data volume back-ups	Response Time Data 1 week old or less	Commence restore within 8 hours from VITA request	
Restore Requests for recovery of data or data volume back-ups	> than 1 week old	Commence restore within 3 Business Days	
	Formula	Number of requests completed within Performance Target /Total of all requests occurring during Measurement interval	
	Measurement Interval	Measure Weekly, Report Monthly	
	Measurement Tool	TBD	

4.3.2 IT Continuity and Disaster Recovery (DR) Requirements

Table 28. IT Service Continuity and DR Service Levels

Definition	Time to recover the affected Commonwealth Services after a declared DR incident		
Disaster Recovery Service Level Requirements			
BIA Application Rankings	Service Measure	Performance Target	Minimum Performance % ALL SOWs
1	Time to recover	< 4 hours	
2	Time to recover	5 to 24 hours	
3	Time to recover	25 to 48 hours	
4	Time to recover	49 to 72	
5	Time to recover	>73 hours	
6	Time to recover	Within 168 hours	
	Formula	Number of applications recovered within Performance Target/Total number of applications in Measurement interval	
	Measurement Interval	Measure Monthly/Report Quarterly	
	Measurement Tool	TBD	

4.3.3 Asset Tracking and Management

Within five (5) days after the first day of each calendar quarter, Vendor shall select a statistically valid sample, in accordance with the process specified in the Procedures Manual, to measure Vendor's compliance with the following Service Levels pertaining to the accuracy of individual data elements in the asset tracking database. Accuracy of data shall adhere to the following Service Levels.

Table 29. Asset Tracking Service Levels

Asset Tracking Service Level Requirements Table			
Accuracy of Data in Asset Tracking Database	Accuracy	Accuracy percentage of each of the following data elements as determined by audit:	
		Data Element	Accuracy Percentage
		Serial Number	
		Location	
		Hardware/Software Configuration	

Asset Tracking Service Level Requirements Table		
	Formula	Number of Tracked Assets where data element is determined to be correct <hr/> Total number of Tracked Assets audited.
	Measurement Interval	Audited as specified in Operations Manual (quarterly as of Effective Date).
	Measurement Tool	TBD

4.3.4 End-User Satisfaction Surveys

Consistent with Section 3.17 of the Agreement, VITA and Vendor shall establish a mutually agreed-upon End-User Satisfaction survey, that may be facilitated by a third party and designed with VITA and Vendor input.

The third party shall supply to VITA semiannual reports of Commonwealth business End-User Satisfaction, integrating the results of ongoing End-User Satisfaction surveys for each Tower. Upon delivery of each such report, the Parties shall meet to jointly identify any areas of End-User dissatisfaction. Vendor shall prepare a project plan with VITA's input and approval to resolve identified End-User dissatisfaction.

Table 30. End-User Satisfaction Service Levels

End-User Satisfaction Service Level Requirements			
END-USER SATISFACTION	SERVICE MEASURE	PERFORMANCE TARGET	MINIMUM PERFORMANCE %
Scheduled Survey (conducted semi-annually by VITA or its designated third-party agent)	End-User Satisfaction rate	End-Users surveyed should be very satisfied or satisfied	
	Formula	Sum of survey result from each participant/Total number of participants responding to Scheduled Survey	
	Measurement Interval	Measure Semi Annually/Report Semi Annually	
	Measurement Method/Source Data	TBD	

4.4 Reports

Vendor shall provide written reports to VITA regarding Vendor's compliance with the Service Levels specified in Section 4.3 of this SOW. In addition, the following reports are required:

Table 31. Cross Functional Services Reports

Report Description	Timing
TBD – Example reports to be provided by Vendor as part of its response	